

CLAIM AMENDMENTS

This listing of claims will replace all prior versions, and listings, of claims in the application.

1 1. (Original) A system for monitoring and controlling utility-based consumption
2 comprising:

3 a reader for obtaining utility consumption data from a utility meter; and
4 a computer system for collecting the data from the reader wherein the
5 computer system computes a forecast of consumption for one or more
6 predetermined periods of time and wherein the computer system signals for the
7 control of consumption through the controlling of one or more devices that
8 consume utility-based product based on the forecast.

1 2. (Original) The system according to claim 1, wherein the data is electric power
2 consumption data.

1 3. (Original) The system according to claim 1, wherein the data is natural gas
2 consumption data.

1 4. (Original) The system according to claim 1, wherein the data is water
2 consumption data.

1 5. (Original) The system according to claim 1, wherein the forecast of
2 consumption is based on usage for a portion of the predetermined period of time.

1 6. (Original) The system according to claim 1, wherein the computer system
2 repeatedly computes the forecast.

1 7. (Original) The system according to claim 1, wherein the computer system
2 signals for the control the one or more devices so that usage for the predetermined
3 time period falls below a predetermined amount.

1 8. (Original) The system according to claim 7, wherein the computer system
2 signals for the control of one or more of the devices through the decreasing of
3 the amount of time that one or more one of the devices run.

1 9. (Original) The system according to claim 1, wherein one or more of the
2 devices includes a climate control device.

1 10. (Original) The system according to claim 9, wherein the climate control
2 device is an air conditioning unit.

1 11. (Original) The system according to claim 7, wherein the predetermined
2 amount represents a baseline above which the cost of electricity increases.

1 12. (Original) The system according to claim 7, wherein the predetermined
2 amount represents a target and when usage falls below the target for the
3 predetermined time period the user becomes entitled to a rebate.

1 13. (Original) The system according to claim 1, further comprising a user
2 interface at the computer system wherein the user interface displays indicia
3 related to consumption to the user.

1 14. (Original) The system according to claim 13, wherein the indicia related to
2 consumption is representative of historical usage.

1 15. (Original) The system according to claim 13, wherein the indicia related to
2 consumption is representative of then-current usage in real time.

1 16. (Original) The system according to claim 15, wherein the indicia related to
2 consumption includes a moving picture.

1 17. (Original) The system according to claim 16, wherein the moving picture
2 includes a chart of usage.

1 18. (Original) The system according to claim 1, further comprising means for
2 accessing the user interface from a location remote from the computer system for
3 providing the user input.

1 19. (Original) The system according to claim 18, further comprising means for
2 displaying indicia related to power consumption at the remote location.

1 20. (Original) The system according to claim 1, wherein the utility company
2 sends the alerts to the computer system to reduce consumption during a crisis
3 situation.

1 21. (Original) The system according to claim 1, wherein the utility company
2 communicates with the computer system via the Internet.

1 22. (Original) The system according to claim 1, wherein the utility company
2 sends the alerts to the computer system via the Internet.

1 23. (Original) The system according to claim 1, wherein the alerts from the
2 utility company are based on forecasts of how much power will be consumed.

1 24. (Original) The system according to claim 1, wherein the utility company
2 communicates with the computer system to obtain data on power usage for billing
3 purposes.

1 25. (Original) The system according to claim 1, wherein the utility company
2 instructs the computer system to adjust the consumption of one or more devices.

1 26. (Original) The system according to claim 1, wherein the reader monitors a
2 value displayed by a seven-segment numeric indicator by monitoring the state of
3 seven segments associated with said indicator and determining the value
4 displayed by said indicator by associating each value that said indicator can
5 display with the state of each segment associated with said indicator.

1 27. (Original) The system according to claim 1, wherein the system includes
2 multiple readers for reading utility consumption data from multiple meters and

3 wherein the computer computes the forecast based on the data from multiple ones
4 of the readers.

1 28. (Currently Amended) A method of monitoring and controlling utility-based
2 consumption comprising:

3 reading consumption data from [[an]] a utility meter using an automatic
4 reader;

5 collecting the data from the reader in a computer memory device;
6 computing a forecast of consumption for one or more predetermined periods of
7 time using a computer system; and

8 controlling an amount of consumption by the computer system signaling
9 for the control of one or more devices that consume utility-based product based
10 on the forecast.

1 29. (Original) The method according to claim 28, wherein the data is electric
2 power consumption data.

1 30. (Original) The method according to claim 28, wherein the data is natural gas
2 consumption data.

1 31. (Original) The method according to claim 28, wherein the data is water
2 consumption data.

1 32. (Original) The method according to claim 28, wherein the forecast of
2 consumption is based on power usage for a portion of the predetermined period of
3 time.

1 33. (Original) The method according to claim 28, wherein said controlling
2 controls the one or more devices so that usage for the predetermined time period
3 falls below a predetermined amount.

1 34. (Original) The method according to claim 28, wherein the predetermined
2 amount represents a baseline above which cost of the utility supplied product
3 increases.

1 35. (Original) The method according to claim 28, wherein the predetermined
2 amount represents a target and when usage falls below the target for the
3 predetermined time period the user becomes entitled to a rebate.

1 36. (Original) The method according to claim 28, further comprising displaying
2 indicia related to consumption.

1 37. (Original) The method according to claim 36, wherein the indicia related to
2 consumption is representative of historical usage.

1 38. (Original) The method according to claim 36, wherein the indicia related to
2 consumption is representative of then-current usage in real time.

1 39. (Original) The method according to claim 38, wherein the indicia related to
2 consumption includes a moving picture.

1 40. (Original) The method according to claim 39, wherein the moving picture
2 includes a chart of usage.

1 41. (Original) The system according to claim 28, wherein the utility company
2 sends the alerts to the computer system to reduce power consumption during a
3 crisis situation.

1 42. (Original) The system according to claim 28, wherein the utility company
2 communicates with the computer system via the Internet.

1 43. (Original) The system according to claim 28, wherein the utility company
2 sends the alerts to the computer system via the Internet.

1 44. (Original) The system according to claim 28, wherein the alerts from the
2 utility company are based on forecasts of consumption.

1 45. (Original) The system according to claim 28, wherein the utility company
2 communicates with the computer system to obtain data on power usage for billing
3 purposes.

1 46. (Original) The system according to claim 28, wherein the utility company
2 instructs the computer system to adjust the consumption of one or more devices.

1 47. (Original) The system according to claim 28, wherein the reader, monitors a
2 value displayed by a seven-segment numeric indicator by monitoring the state of
3 seven segments associated with said indicator and determining the value
4 displayed by said indicator by associating each value that said indicator can
5 display with the state of each segment associated with said indicator.

1 48. (Original) The system according to claim 28, wherein said controlling
2 comprises adjusting a thermostat to provide additional cooling during a non-peak
3 use period leading up to a peak use period and further adjusts the thermostat to
4 provide lesser cooling during the peak use period.

1 49. (Original) The system according to claim 28, wherein said controlling
2 comprises adjusting the use of one or more devices according to at least one
3 calculated formula agreed to between the consumer and the utility.

1 50. (Original) A system for monitoring and controlling power consumption
2 comprising:

3 one or more readers for obtaining power consumption data from one or
4 more electric utility meters; and

5 a computer system for collecting the data from the one or more readers
6 wherein the computer system makes forecasts of electric power consumption
7 based on the data and signals for the control of power consumption by controlling
8 one or more devices that consume electricity.

1 51. (Original) The system according to claim 50, wherein the computer system is
2 located at the utility company.

1 52. (Original) The system according to claim 50, wherein the computer system
2 repeatedly computes the forecast.

1 53. (Original) The system according to claim 50, wherein the computer system
2 controls one or more devices so that usage falls below a predetermined amount.

1 54. (Original) The system according to claim 50, further comprising a user
2 interface at the computer system wherein the user interface displays indicia
3 related to power consumption to the user.

1 55. (Original) The system according to claim 54, further comprising means for
2 accessing the user interface from a location remote from the computer system for
3 providing the user input.

1 56. (Original) The system according to claim 50, wherein the utility company
2 sends alerts to the computer system to reduce power consumption during a crisis
3 situation.

1 57. (Original) The system according to claim 50, wherein the utility company
2 communicates with the computer system to obtain data on power usage for billing
3 purposes.

1 58. (Original) The system according to claim 50, wherein the utility company
2 instructs the computer system to adjust the consumption of one or more devices.

1 59. (Original) The system according to claim 50, wherein the reader, monitors a
2 value displayed by a seven-segment numeric indicator by monitoring the state of
3 seven segments associated with said indicator and determining the value
4 displayed by said indicator by associating each value that said indicator can
5 display with the state of each segment associated with said indicator.

1 60. (Withdrawn) A method for monitoring the value displayed by a segmented
2 numeric indicator, comprising:
3 monitoring the state of segments associated with said indicator; and
4 determining a value displayed by said indicator by associating each value
5 that said indicator displays with the state of each monitored segment.

1 61. (Withdrawn) The method according to claim 60, wherein a plurality of
2 segmented indicators together indicate a present utility consumption.

1 62. (Withdrawn) The method according to claim 60, wherein the state of six
2 segments are monitored and one segment is not monitored, wherein said one
3 segment is selected from the group of segments consisting of: a top-right
4 segment, a bottom-right segment, a bottom segment, a bottom-left segment and a
5 top-left segment.

1 63. (Withdrawn) The method according to claim 60, wherein the state of five
2 segments are monitored and a bottom segment and one other segment is not
3 monitored, and wherein the said one other segment is selected from the group
4 consisting of: a top-right segment and a bottom-right segment.

1 64. (Withdrawn) The method according to claim 60, wherein the states of the
2 segments are monitored by an optical sensor.

1 65. The method according to claim 60, wherein the states of the segments are
2 monitored by a detector selected from the group of detectors consisting of a two-
3 dimensional array of detectors and multiple linear array detectors.

1 66. (Withdrawn) A method for monitoring the value displayed by a segmented
2 numeric indicator, comprising:

3 monitoring the state of five segments associated with said indicator
4 wherein the five segments are not a bottom segment and one other segment and
5 wherein the said one other segment is selected from the group consisting of: a
6 top-right segment and a bottom-right segment; and

7 determining a value displayed by said indicator by associating each value
8 that said indicator displays with the state of each monitored segment.

1 67. (Withdrawn) A method for monitoring the value displayed by a segmented
2 numeric indicator of a utility meter, comprising:
3 obtaining data by optically monitoring a plurality of segmented indicators
4 which together indicate a present utility consumption; and
5 determining a value displayed by said indicator by performing optical
6 character recognition on the obtained data.

1 68. (Withdrawn) The method according to claim 67, wherein the plurality of
2 segmented indicators are optically monitored by an integrated array of optical
3 sensors.